



Message from the Executive Director

The Move

Dear Colleagues,

We are three months away from the beginning of a series of moves that will shape our Research Institute for the coming decades. As I wrote in the past, the design and construction of the RI facilities at the Glen, as well as the moving of labs and infrastructure from numerous locations to two, is a monumental job and I am thankful to all of you for your participation and collaboration. At present, we are working on the last details needed to facilitate our operations at the Glen.

Following the move of our people to the Centre of Translational Biology (CTB) we will finalize the details for the move to the Centre for Innovative Medicine (CIM) and the Centre of Outcomes Research and Evaluation (CORE). We hope that the CORE space issue will soon be resolved in parallel with the reorganization and move of some of our members to the Montreal General Hospital.

For the past month, we have been working to ensure that all equipment, systems and other components at the Glen are functional, while also finalizing the transfer plan. The time-frame of the transfer, which will be completed by Health Care Relocations (HCR), calls for a short, three-week period to move our members from the various sites to the Glen.

I understand that all of us would like to keep the labs running until the last day before the move. However, this will not be possible since some preparatory work will have to be done in advance of the move. Moreover, we have to ensure that new orders of materials are directed to the Glen rather than our existing facilities, which will be empty following the move. Thus, the RI management committee has decided to stop ordering materials three weeks before the site-specific designated move date.

Please, note that this move represents an unprecedented task and we should not miss the opportunity to reorganize our labs and research to take advantage of the new facilities, while at the same time "clean" our labs of old chemicals and materials, equipment, books etc. that have not been used for years.

Thank you for your help, patience, and support.

Wishing you health and happiness for the Holidays and the New Year.

Best regards, Vassili





News about the transition

Open House at the Glen: a great success

Visitors, employees and exhibitors had a taste of what's to come at their new hospital and Research Institute. More than 15,000 visitors, over 300 volunteers and 41 exhibitors gathered this past weekend, December 6 and 7, for the MUHC and Research Institute Open House event.

It was with great enthusiasm that employees, patients and members of the public discovered their new home, while enjoying guided tours and entertainment provided by our exhibitors and partners.

The RI-MUHC welcomed more than 300 visitors who took part in 24 tours of the research facilities. Administrative and research staff volunteered as tour guides and helped us make this event a success!

The first stop was in the Atrium with the impressive suspended sculpture *Lustre* (hémoglobine) from Montreal artist Nicolas Baier. Visitors then had the

opportunity to tour the Centre for Translational Biology (CTB) on the first floor, and see the new work environment with the open lab concept and the technical platforms. The tour ended in the MUHC Central Labs, housed in Bloc E, and the footbridge back to the hospital.

The MUHC and RI-MUHC would like to thank the public, the contributors, security, activation and housekeeping teams, and all of the volunteers who, with dedication and joy, made this event a great success. 2015 will be a year of transformation, innovation and excellence. Thank you all for your support! To see more pictures visit our RI portal.

We also would like to thank the following researchers and their teams for preparing and staffing booths during the Open House to help raise public awareness about RI-MUHC research:

Dr. Reza Farivar's team (MGH) with a booth on the Traumatic Brain Injury Research Unit;

Dr. Isabelle Gagnon's team (MCH) with a booth on the Kids and Teens Concussion Research Lab;

Dr. Momar Ndao and Alessandra Ricciardi (MGH) with a booth on the National Reference Centre for Parasitology (NRCP);

Dr. Jean-Pierre Routy with Kishanda Vyboh and Vikram Mehraj (MCI) with a booth on the Chronic Viral Illness Laboratory: HIV and HCV infection.







A special thanks to our tour guides from the administrative and research staff who volunteered all weekend (from left to right): André Simard (Supervisor, Grant Management), Olivier Radresa (Research Associate, Endocrinology and Metabolism), Zehra Khoja (Research Assistant, Newborn Medicine), Patrice Vaillancourt (Technology Platforms and Site Manager) and Joshua Ejdelman (Technician, Animal Resource). Missing from the picture: Sandra Atweh (Technician, Redevelopment), Ulysses Caravias (Chief Accountant, Finances), Jean-Marie Chavannes (Director, Redevelopment), Wanda Cromlish (Coordinator, Redevelopment), Mihaela Cucu (Environmental Health and Safety), Lucie Grégoire (Manager, Redevelopment), Carole Lévesque (Human Resources), Sonia Rea (Director, Human Resources) and Elie Salloum (Activation Technician, Redevelopment).

Closing events on different sites

The MUHC's Legacy Year has begun. Several events leading up to the official closing of the current hospital sites have already taken place. The events are a tribute to each of the sites to celebrate their history and heritage and what they have meant to the staff and patients throughout the years. Keep your finger on the pulse by visiting the website: http://muhclovesmtl.ca/.





Communications



2013-2014 Annual report of the RI-MUHC

Our 2013-2014 Annual Report of the RI-MUHC (Adult and Pediatric Research) is now available online and can be viewed by clicking here. The theme this year, "RI-MUHC 2015 - Transformation, Innovation, Excellence, "highlights the main achievements of our investigators and their teams in adult and pediatric research on the eve of a significant step in the history of the MUHC and the RI-MUHC: the redevelopment at the Glen and at the Montreal General Hospital. We also decided to focus this report on the Centre of Outcomes Research and Evaluation, which is one of the main strengths of the RI-MUHC.

Positioning Montreal among the world's leaders in medical research

In November, three major university hospital research centres – the Research Institute of the McGill University Health Centre (RI-MUHC), the Centre hospitalier de l'Université de Montréal (CHUM) and Sainte-Justine University Health Centre (CHU) – joined forces to make Montréal a global centre of expertise in early stage clinical trials. The ambitious goal, in collaboration with Montréal InVivo and the Fonds de recherche du Québec – Santé (FRQS), is to double the number of patients involved in early clinical research studies by 2020 and to position Montreal among the world leaders in medical research. Watch the Youtube video

Our researchers in the news!

Press releases

Obesity may shorten life expectancy up to 8 years

Canadian researchers put numbers on health risk (Dec 4, 2014) Read more

Media coverage: Canadian Press, CTV News, Sun Media, TVA/LCN, Global TV, McGill Reporter, BBC (UK) Afrique, Time (USA), METRO US, Le Figaro & France Soir (France), etc.

Antibiotics get a "time-out"

MUHC study examines the effect of regular re-evaluation of antibiotic use on cost and C. difficile infection rates (Nov 17, 2014) Read more

Media coverage: CTV Health National, Radio-Canada, Infection Control Today, McGill Reporter, etc.

Total recall: the science behind it

MUHC-led study identifies new player in brain function and memory (Nov 13, 2014) Read more Media coverage: Daily Mail (UK), Singapore News, Science News, etc.

A key to aortic valve disease prevention: Lowering cholesterol early

An international research team led by the RI-MUHC provides new evidence that aortic valve disease may be preventable (Oct 25, 2014) Read more

Media coverage: McGill Reporter, Daily Rx, Medical Xpress, etc.





Osteoporosis treatment may also benefit breast cancer patients

RI-MUHC-led study shows treatment has protective effect on bone metastasis (Oct 2, 2014) Read more

Media coverage: Journal Métro, Science 2.0, Breast Cancer News, News.Medical.Net, Medical Daily, etc.

The "hidden injury" in sports

MUHC research sheds light on concussions (Sept 12, 2014) Read more

Media coverage: The Gazette, Global TV Morning Show, Science News Line, Ivanhoe, etc.

New study to cut wait times in genetic testing for Ashkenazi Jews in Montreal (Sept 2, 2014) Read more

Some other significant media coverage

Infections et cellules cancéreuses : un dangereux mélange

Découverte, ICI Radio-Canada, December 13, 2014

Featuring Dr. Lorenzo Ferri and Dr. Johnathan Cools-Lartigue

http://ici.radio-canada.ca/nouvelles/science/2014/12/12/001-cancer-mecanisme-propagation-etude-mcgill.shtml and the video at http://ici.radio-canada.ca/tele/decouverte/2014-2015/

Le sida, encore une maladie de stigmatisation et de tabous

Médium Large, ICI Radio-Canada Première, December 1st, 2014

Featuring Dr. Jean-Pierre Routy

http://ici.radio-canada.ca/emissions/medium large/2014-2015/chronique.asp?idChronique=356710

Should post-menopausal women take calcium?

CTV News at noon with Mutsumi Takahashi, November 26, 2014

Featuring Dr. Suzanne Morin who is leading a study on the subject at the MUHC

http://montreal.ctvnews.ca/video?playlistId=1.2120313

Symposium to study use of medical marijuana

Charlie Fidelman

Montreal Gazette, November 6, 2014

Featuring Dr. Mark Ware

http://montrealgazette.com/news/local-news/seeking-more-data-about-use-of-medical-marijuana

App puts process of AIDS testing in the palm of your hand

David Israelson

Special to The Globe and Mail, October 23, 2014

Featuring Dr. Nitika Pant Pai

http://www.theglobeandmail.com/report-on-business/small-business/sb-tools/app-puts-aids-test-in-the-palm-of-your-hand/article21223029/

Miracle en vue pour les insomniaques ? La mélatonine remplit-elle ses promesses ?

Sophie Allard

La Presse +, September 23, 2014

Featuring Dr. Gabriella Gobbi

http://plus.lapresse.ca/screens/8f6a282f-dce4-4d83-a5d5-8283bfbe9ef5%7CUXyyu-J8fil0.html





RI-MUHC member to hold a symposium at the AAAS Annual Meeting 2015

NAAAS 2015 ANNUAL MEETING INNOVATIONS, INFORMATION, AND IMAGING

Dr. Mark Ware, RI-MUHC Investigator and Director of Clinical Research of the Alan Edwards Pain Management Unit at the MUHC, will hold a symposium on medical cannabis at the 2015 Annual Meeting of the American Association for the Advancement of Science (AAAS) on February 14 in San Jose, CA.

The AAAS Annual Meeting brings together thousands of scientists, engineers, policymakers, educators, and journalists to discuss the most recent developments in science and technology.

Dr. Ware's symposium, entitled *Cannabis and Medicine: a New Frontier in Therapeutics*, will explore the science behind medical cannabis. The medical benefits of marijuana have been studied for years and while there is little evidence to support the consideration of cannabis as a therapeutic agent, it is an area of growing interest, and clinical research into the safety and efficacy of cannabinoids is informing the



Dr. Mark Ware

debate. More and more data are being collected and analyzed through patient registries, clinical trials, and other observational studies.

Dr. Ware will be joined by two accomplished international experts on cannabis and cannabinoids: Dr. Igor Grant from the University of California in San Diego in the United States, an internationally recognized neuropsychiatrist, whose research interests have ranged from the neurobiology of HIV/AIDS and substance abuse to the therapeutic potential of medicinal cannabis, and Professor Roger Pertwee from the University of Aberdeen in Scotland who has been one of the world's leading cannabinoid scientists for over 30 years.

Dr. Ware is also an associate professor in family medicine and anesthesia in the Department of Medicine at McGill University, o-director of the Quebec Pain Research Network and Executive Director of the non-profit Canadian Consortium for the Investigation of Canadianoids.





Research highlights

Unique Canada-wide aging study begins sharing data

Researchers interested in the health and wellbeing of Canadians now have a treasure trove of additional information to draw on. The first major data release from the *Canadian Longitudinal Study on Aging* (CLSA) is underway and offers data that can provide a snapshot of Canadians aged 45 to 85. The CLSA Statistical Analysis Centre based at the Research Institute of the McGill University Health Centre (RI-MUHC) plays an essential role in the management of all the information collected in the CLSA.

The CLSA follows 50,000 Canadians 45 to 85 years old every three years for 20 years. The platform offers researchers a wide range of information about the changing biological, medical, psychological, social, lifestyle and economic aspects of people's lives.

"Until recently, studies on aging fell into one of two categories: those looking at the social aspects of old age and those focused on disease. Our study is unique because it combines both and includes participants as young at 45," says CLSA co-principal investigator, Dr. Christina Wolfson, researcher at the RI-MUHC and professor at McGill University's Departments of Medicine and of Epidemiology, Biostatistics and Occupational Health.

There are two intensities of data collection within the CLSA. Data are collected through telephone interviews for 20,000 participants and through face-to-face in-home interviews followed by physical assessments for an additional 30,000 participants. Recruitment and baseline assessments for the



Dr. Christina Wolfson, CLSA co-PI (RI-MUHC)

20,000 participants interviewed by telephone are complete and the data are now available to researchers. These interviews include detailed questions about physical, emotional and social health status.

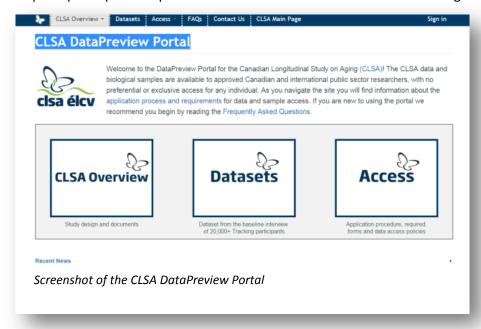
"If you want to know the number of people who reported having Parkinson's disease or high-blood pressure or who have retired and then returned to the work force, for example, you can find it in the study," Dr. Wolfson explains. "Participants are also asked about their family structure, retirement plans and financial situation. This information can be used by health professionals, epidemiologists, sociologists, psychologists, government agencies and pretty much anybody interested in health research and health policy."

The RI-MUHC is one of 11 CLSA data collection sites. It is also home to the Statistical Analysis Centre where the team examines the quality and reliability of the data and prepare it to be released to researchers.





"We are the stewards of this information," she says. "It is a humbling responsibility to ensure it is kept anonymous and confidential and that these data are released according to the guidelines of the CLSA. "We also keep our participants' expectations for the use of these data in mind during this process."



The remaining 30,000 participants will undergo more in-depth evaluations, including a physical assessment and collection of blood and urine samples. More than 24,000 have been recruited and assessed so far and recruitment will be complete in the summer of 2015 when the first follow up will begin. Data and bio specimens from these 30,000 participants will be ready for release in 2016.

According to Dr. Wolfson, research about previous generations can't predict the needs of the baby boomers as they age. "Everybody suspects that baby boomers will age differently from their parents. Society has changed. People are staying in the workforce longer than before. There are new treatments for diseases. We'll be able to see in real time how these changes in their lives affect their health, and how changes in their health affect their lives," she explains.

The ultimate aim of the CLSA platform is to provide data that will be used by researchers across the country in projects that contribute to improve the health of Canadians. "The data and bio specimens reside with the CLSA, but are available to the broad research community, she says. "The success of this study on a national level over the next 20 years is dependent upon the research community's use of this important national resource."

The CLSA is a strategic initiative of the Canadian Institutes of Health Research and the infrastructure needed to collect these data is supported by a Canada Foundation for Innovation Award.

To access the CLSA DataPreview Portal: <u>datapreview.clsa-elcv.ca</u>





Creative clinician-scientists win big at Hacking Health Challenge

Imagine dreaming up a practical solution to a common healthcare problem, such as a game that eases anxiety in kids as they go through an MRI exam or a guided self-help app for patients with depression. Now imagine being in a room full of talented web designers, videogame experts and programmers, eager to help bring your idea to life. Well, the dream became a reality in November during Design Challenge Montreal, which was part of the Montreal Summit on Innovation.

Design Challenge Montreal, was organized by Hacking Health - a group that fosters collaboration between front-line clinicians, healthcare workers and technology experts to produce innovative and realistic solutions to healthcare problems. On the evening of the 26th of November, the group held its Hacking Health Challenge Grand Finale. After three weeks of intense work, eight teams had a chance to pitch their prototypes to investors and more than 200 health technology entrepreneurs, healthcare professionals and industry leaders. Dr. Nancy Low, RI-MUHC researcher in Health Outcomes, was among the finalists.

Helping patients keep on track with depression treatment

When she conceived an app to help students facing depression, Dr. Nancy Low, a psychiatrist in the Mood Disorders Program at the Royal Victoria Hospital and clinical director of the McGill Mental Health Service, was eager to find a solution to a very concrete problem. "Our clinics are overburdened, with long wait times," she says. "I wanted to improve service to our patients and help them adhere to treatment between appointments."

Dr. Low and her team created OnTrack, an app that gives patients timely access to guidance on three types of treatment for mild to moderate depression: mood monitoring, medication and talk therapy homework, which includes doing suggested pleasurable activities. Although the combination of those treatments is very effective, patients have a hard time following them, so they fall off their plan and can even get worse.

From a business point of view, the whole process was a revelation to Dr. Low. "It was a steep learning curve for me, but the whole process is so interesting and stimulating," she says. "The resulting app is super cute and I'm amazed that we already have a prototype. The whole team put their heart and soul into the effort which made this whirlwind of weeks extremely rewarding."



Dr. Nancy Low (left) with two other finalists from the MUHC, Dr. Hans Van Lancker and Sylvia Papazian

Read more





A face-to-face with our research leaders

Interview with Dr. Madhukar Pai

Director of the McGill Global Health Programs
Program co-leader, Infectious Diseases and Immunity in
Global Health, RI-MUHC
Associate Director, McGill International TB Centre
Associate Professor, Department of Epidemiology,
Biostatistics & Occupational Health, McGill



Dr. Pai, this past summer, you have been appointed Director of Global Health Programs at McGill University – a very prestigious position in an evolving field. What are your goals in this new position?

At McGill University and at the Research Institute of the McGill University Health Centre (RI-MUHC), we have the potential to be a leader in global health and translational research. In all areas of health, there is now an increasing emphasis on translating basic science to get products (e.g. diagnostics, drugs) into clinics, translational epidemiology to get policies implemented at the population level, and translational global health, which can bridge the science-to-service continuum.

I am very pleased to have this opportunity to provide leadership in these areas. As Director of Global Health Programs, I am working hard to create a strong and vibrant new global health program that will inspire students to address global health challenges, and facilitate partnerships for faculty members.

What will be your new responsibilities?

Global Health Programs will include 3 major programs: Global health education and training, Global health research, Global health policy, partnerships, and advocacy.

We are identifying our major areas of strength and likely themes that will become relevant in the future for all three programs. With our current strengths identified (e.g. Tuberculosis, HIV, neglected tropical diseases such as parasitic infections), we will promote our expertise in the McGill network as an attractive setting for training and research. Emerging themes may include trauma, environment, mental health and non-communicable diseases as these will become critically important in the future as developing countries undergo health transition, and non-communicable diseases will become the main source of ill health. Read more





Honours and Awards

Congratulations go out to three RI-MUHC members who were recently inducted as Fellows in the Canadian Academy of Health Sciences (CAHS):

- Dr. William David Foulkes, James McGill Professor of Medicine, Human Genetics and Oncology at McGill and Director of McGill's Program in Cancer Genetics.
- Dr. Louise Pilote, Chief of General Internal Medicine at the MUHC and Associate Professor of Medicine and an Associate Member in the Department of Epidemiology and Biostatistics at McGill
- Dr. Michael Shevell, Chair of the Department of Pediatrics at McGill and Pediatrician-in-Chief at the Montreal Children's Hospital of the MUHC.

Congratulations also go out to:

Dr. Qutayba Hamid for receiving the Canadian Society for Clinical Investigation (CSCI) Distinguished **Scientist Award Notification.**

Dr. George Thanassoulis who was awarded the 2014 Canadian Cardiovascular Society Young **Investigator Award.**

Dr. Stella Daskalopoulou who received the 2014 Hypertension Canada Jacques de Champlain New Investigator Award in recognition of her dedication and numerous contributions to both research and health services in Canada.

Dr. Madhukar Pai who was named to Royal Society of Canada's College of New Scholars, Artists and Scientists.

Dr. Errol Marliss who received the 2014 Lifetime Achievement Award from the Canadian Diabetes Association.



